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(43) International Publication Date
19 September 2002 (19.09.2002)

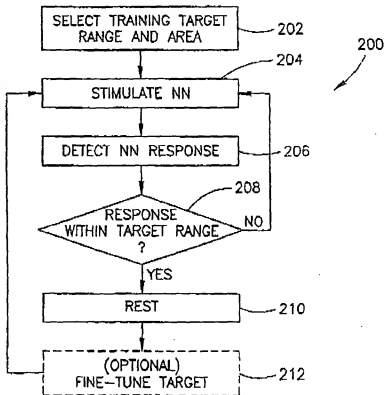
PCT

(10) International Publication Number
WO 02/073526 A3

- (51) International Patent Classification: A61B 5/00
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- (21) International Application Number: PCT/IL02/00204
(22) International Filing Date: 13 March 2002 (13.03.2002)
(25) Filing Language: English
(26) Publication Language: English
- (30) Priority Data:
60/275,396 13 March 2001 (13.03.2001) US
60/337,846 8 November 2001 (08.11.2001) US
- (63) Related by continuation (CON) or continuation-in-part
(CIP) to earlier application:
US 60/337,846 (CIP)
Filed on 8 November 2001 (08.11.2001)
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- (54) Title: CEREBRAL PROGRAMMING

[Continued on next page]

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(57) Abstract: A method of training a biological neural network using a controller includes the steps of applying a cycle comprising stimulating a neural network using the controller by applying at least an input signal to the network (204), detecting an output response of the network by the controller (206), modifying the stimulation of the neural network for at least a period of time if the response matches a desired at least approximate response (208), and repeating the cycle of stimulation, detection, and modification at least one more time (212) until the neural network is trained to generate a desired output response for said input signal.

(88) Date of publication of the international search report:
12 December 2002

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

— with international search report

INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL02/00204

A. CLASSIFICATION OF SUBJECT MATTER

IPC(C) : A61B 5/00

US CL : 600/554; 607/48; 128/925

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 600/554; 607/48; 128/925

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EAST

Search terms: neural network, electrical stimulation, training

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,396,896 A (TUMBEY et al) 14 March 1995 (14.03.1995), col.6, line 40 thru col.7, line 59.	1,6,7,9,11,14,15,24
A	US 5,325,862 A (LEWIS et al) 05 July 1994 (05.07.1994), all	1, 68,83,100
A	US 6,171,239 B1 (HUMPHREY) 09 January 2001 (09.01.2001), Fig.12, col.13, lines 15-55.	1,68,83

☐ Further documents are listed in the continuation of Box C.☐ See parent family annex.

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"Z"

document member of the same patent family

Date of the actual completion of the international search

28 July 2002 (28.07.2002)

Date of mailing of the international search report

12 SEP 2002

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Communications of Patents and Trademarks
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